

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number  
**WO 2004/017759 A3**

(51) International Patent Classification<sup>7</sup>: **A23L 1/212**,  
2/02, 2/385, 2/08, 1/068, A61K 35/78, A23L 1/06, A23N  
15/00

(21) International Application Number:  
PCT/EP2003/008639

(22) International Filing Date: 5 August 2003 (05.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
MI2002A001801 8 August 2002 (08.08.2002) IT

(71) Applicant (for all designated States except US):  
**ZANICHELLI RICERCHE S.R.L.** [IT/IT]; Via Gat-  
teschi 10, I-00162 Roma (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **ROMEO, Aurelio**  
[IT/IT]; Via Gatteschi 10, I-00162 Roma (IT).

(74) Agents: **SAMA, Daniele et al.**; Sama Patents, Via G.B.  
Morgagni 2, I-20129 Milano (IT).

(81) Designated States (*national*): AE, AG, AL, AU, BA, BB,  
BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, GD, GE, HR,  
ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG,  
MK, MN, MX, NO, NZ, OM, PH, PL, SG, TN, TT, UA,  
US, UZ, VN, YU, ZA.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

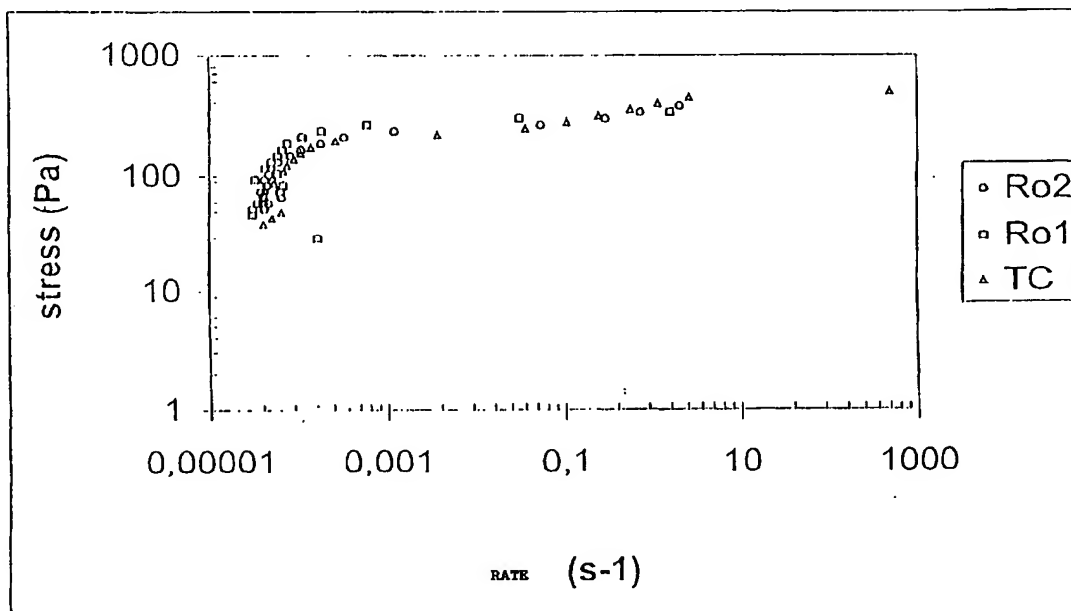
Published:

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
21 May 2004

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: TOMATO PRODUCTS



(57) Abstract: Tomato products obtained from tomato juice or tomato passata having the following composition in percentage by weight : - dry residue 5,5 - 20 %, - water 94,5 - 80 %, 100 % being the sum of the two components, wherein the amount of water insoluble and water soluble solids in the dry residue ranges in percentage by weight : - water insoluble solids from 18 % to 70 %. - Water soluble solids from 82 % to 30 % The sum of the two components being 100 % of the dry residue.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/08639

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23L1/212 A23L2/385 A23L1/068 A23L1/06 A23L2/02  
A23L2/08 A61K35/78 A23N15/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23L A61K A23N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, BIOSIS, FSTA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 451 420 A (BRAIN CHARLES H ET AL) 19 September 1995 (1995-09-19) * column 1, lines 63-65; claims 1 and 3 *	1-23
A	EP 0 888 718 A (NESTLE SA) 7 January 1999 (1999-01-07)	1-11
X	* page 2, lines 42-46; page 5, lines 20-29; pages 5-7, example 1; claims 8, 9 *	12
A	DD 201 847 A (TS LAB PRZEMYSŁU KONZENTRATOW) 17 August 1983 (1983-08-17) * page 3, last paragraph; page 4, paragraph 1; examples I, II and IV, claim*	1-23
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the International search

16 March 2004

Date of mailing of the International search report

07. 04. 2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Georgopoulos, N

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/08639

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 48287 A (LYCORED NATURAL PROD IND LTD) 24 December 1997 (1997-12-24) * page 3, paragraphs 2-8; examples 1 and 2; claims 1, 3 and 4 *	12
X,P	WO 03 024243 A (SUCCAR JORGE K ;CONAGRA GROCERY PRODUCTS COMPA (US); TISHINSKI THE) 27 March 2003 (2003-03-27) * page 2, lines 34-35; page 3, lines 9-33; claims 1, 5, 6 and 17-19 *	12,14, 22,23
X	US 5 837 311 A (RAVEH YIGAL ET AL) 17 November 1998 (1998-11-17) * column 2, lines 1-25; example 1; claims 1, 3, 8 and 14 *	12
X	US 4 670 281 A (BRADLEY DONALD B) 2 June 1987 (1987-06-02) * column 1, line 63 - column 2, line 3; example; claims 1, 3, 6 and 10 *	12
X	DATABASE WPI Section Ch, Week 199320 Derwent Publications Ltd., London, GB; Class D14, AN 1993-166056 XP002268931 -& SU 1 738 241 A (ODESS FOOD IND TECH), 7 June 1992 (1992-06-07) abstract	12

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 03/08639

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

As a result of the prior review under R. 40.2(e) PCT,  
part of the additional fees are to be refunded.

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

**1. Claims: 1-11**

Tomato compositions (dry residue 5.5-20%; water 94.5-80%; in the dry residue: water insoluble solids 18-70% and water soluble solids 82-30%).

Tomato compositions comprising the aforementioned compositions (in the dry residue: water insoluble solids 20-50% and water soluble solids 80-50%).

Use of said compositions for saucing foods, as ready-to-use sauces, for food use or as foods. Foods containing said tomato compositions.

**2. Claims: 12-23**

Process for separating tomato serum from a tomato suspension comprising: a/ filtering said suspension in a separation solid-liquid apparatus under stirring with a stirrer at an angular speed of 1 rpm to 20 rpm (the stirrer being of a shape to convey the suspension toward the central axis of said apparatus); or b/ filtering in said separation solid-liquid apparatus which rotates (without stirrer).

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/08639

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5451420	A	19-09-1995	US 5260083 A	09-11-1993
			US 5503863 A	02-04-1996
			AU 678698 B2	05-06-1997
			AU 1785295 A	29-06-1995
			AU 3536893 A	30-09-1993
			CA 2082751 A1	26-09-1993
			MX 9207051 A1	31-05-1994
EP 0888718	A	07-01-1999	EP 0888718 A1	07-01-1999
			AU 8109298 A	08-02-1999
			WO 9902045 A1	21-01-1999
DD 201847	A	17-08-1983	DD 201847 A5	17-08-1983
WO 9748287	A	24-12-1997	IL 118697 A	31-12-1999
			BR 9702303 A	02-03-1999
			CN 1198661 A , B	11-11-1998
			EP 0844831 A1	03-06-1998
			WO 9748287 A1	24-12-1997
			TR 9800268 T1	22-06-1998
WO 03024243	A	27-03-2003	WO 03024243 A2	27-03-2003
US 5837311	A	17-11-1998	IL 107999 A	08-02-1998
			AU 690201 B2	23-04-1998
			AU 1513195 A	03-07-1995
			WO 9516363 A1	22-06-1995
US 4670281	A	02-06-1987	IT 1185063 B	04-11-1987
SU 1738241	A	07-06-1992	SU 1738241 A1	07-06-1992